

(12) **United States Patent**
Parmer

(10) **Patent No.:** **US 8,961,511 B2**
(45) **Date of Patent:** **Feb. 24, 2015**

(54) **VAGINAL REMODELING DEVICE AND METHODS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1179 days.

(21) Appl. No.: **11/704,067**

(22) Filed: **Feb. 7, 2007**

(65) **Prior Publication Data**

US 2007/0233191 A1 Oct. 4, 2007

Related U.S. Application Data

(60) Provisional application No. 60/743,247, filed on Feb. 7, 2006.

(51) **Int. Cl.**

A61B 18/12 (2006.01)

A61B 18/18 (2006.01)

A61N 7/02 (2006.01)

A61B 18/14 (2006.01)

A61B 18/00 (2006.01)

(52) **U.S. Cl.**

CPC **A61B 18/1485** (2013.01); **A61B 18/1206** (2013.01); **A61B 18/18** (2013.01); **A61B 2018/00023** (2013.01); **A61B 2018/00559** (2013.01); **A61B 2018/00702** (2013.01); **A61B 2018/00791** (2013.01); **A61B 2018/00875** (2013.01); **A61N 7/022** (2013.01)

USPC **606/49**; 606/41; 607/138; 601/3

(58) **Field of Classification Search**

USPC 606/1-52; 607/50, 115, 138

See application file for complete search history.

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(57)

ABSTRACT

This invention relates generally to apparatus and methods for tightening tissue of the female genitalia by heating targeted connective tissue with radiant energy, while cooling the mucosal epithelial surface over the target tissue to protect it from the heat. Embodiments include a treatment tip that comprises both an energy delivery element and a cooling mechanism. As the treatment tip contacts the epithelial mucosa, the tip cools the mucosa by contact, and delivers energy through the epithelium to the underlying tissue, thereby creating a reverse thermal gradient. The effect of the applied heat is to remodel genital tissue by tightening it. Such remodeling may include a tighter vagina and a tighter introitus. The tightening may be a consequence of thermal denaturation of collagen as well as a longer term healing response in the tissue that includes an increased deposition of collagen.

58 Claims, 9 Drawing Sheets

